Applicants: Short et al.

Application No: 10/560,210

Amendment and Response dated August 10, 2009

Reply to Office Action dated May 12, 2009

Page 8

## REMARKS

#### STATUS OF CLAIMS

Claims 85-122 are pending. Claims 88, 89, 95, 97-101, 104-107 and 110 have been withdrawn. Claim 85 has been amended to incorporate Claim 86 and, accordingly, Claim 86 has been cancelled. In addition, Claim 120 has been amended. Support for these claim amendments can be found throughout the specification and in the claims as originally filed. No previously presented matter has been added.

## 35 U.S.C. §112 REJECTIONS

Claims 85-87, 90-94, 96, 102, 103, 108, 109 and 111-122 stand rejected under 35 U.S.C. §112, first paragraph as allegedly failing to comply with the written description requirement. Claim 85 has been amended such that the phrase "binding entity" now reads "binding entity which comprises a carboxyl or an amine functional group." In light of this amendment to Claim 85, this rejection is believed to be moot.

Claim 120 stands rejected under 35 U.S.C. §112, first paragraph as allegedly failing to comply with the written description requirement (new matter). As noted above, Claim 120 has been amended. Support for this amendment can be found at page 6, lines 18-20 and page 7, lines 7-10. In light of this amendment to Claim 120, this rejection is believed to be moot.

Claims 85-87, 90-94, 96, 102, 103, 108, 109 and 111-122 stand rejected under 35 U.S.C. §112, second paragraph as allegedly being indefinite with regard to the phrase detailed below.

Specifically, Claim 85 recited the phrase "coating at least part of the plasma polymer deposit with a binding entity onto which a cell can attach to define a heterogeneous binding surface."

However, Claim 85 has been amended such that the aforementioned phrase now reads "coating at least part of the plasma polymer deposit with a binding entity which comprises a carboxyl or an amine functional group." In light of this amendment to Claim 85, this rejection is believed to be

Applicants: Short et al.

Application No: 10/560,210

Amendment and Response dated August 10, 2009

Reply to Office Action dated May 12, 2009

Page 9

overcome.

In view of the aforementioned amendments and remarks, it is respectfully submitted that the claims are in accord with 35 U.S.C. §112.

### 35 U.S.C. §103 REJECTION

Claims 85-87, 90-94, 96, 102, 103, 108, 109 and 111-122 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Winter-Jensen (WO 02/32591).

Winter-Jensen discloses a material with a pH gradient or hydrophilicity/hydrophobicity gradient useful for the separation of organic compounds as well as processes for obtaining the same. As noted, Winter-Jensen "do not disclose coating of the plasma polymer separately with a binding entity" (see Office Action dated May 12, 2009, page 7, last paragraph, last sentence). Claim 85 has been amended to indicate that the binding entity "comprises a carboxyl or an amine functional group". At page 8 of the Office Action, in discussing Claim 86, the Examiner noted that "Winter-Jensen teaches acrylic acid for plasma monomer, which comprises a carboxyl group". However, Claim 85, as amended, indicates that the binding entity includes the carboxyl or amine functional group. The Examiner referred to the plasma monomer in Winter-Jensen in rejecting Claim 86. As admitted by the Examiner, Winter-Jensen does not disclose use of a binding entity as set forth in Claim 85. Additionally, there is no disclosure of a binding entity comprising of carboxyl or an amine functional group coated atop at least part of a plasma polymer deposit. It is respectfully submitted that the claims as amended are patentable over Winter-Jensen.

Claims 87, 90-93, 109 and 112-119 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Winter-Jensen (WO 02/32591) in view of Chu et al. (Materials Science and Engineering 2002) and further in view of Timmons et al (US 5,876,753).

Applicants: Short et al.
Application No: 10/560,210
Amendment and Response dated August 10, 2009
Reply to Office Action dated May 12, 2009
Page 10

All of the claims rejected on this basis depend from amended Claim 85. As indicated above, Claim 86 has been incorporated in to Claim 85. Claim 86 was not rejected under this basis. Accordingly, it is respectfully submitted that the claims, as amended, are patentable over Winter-Jensen, Chu et al., and Timmons et al., each taken alone or in combination.

Claims 94 and 111 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Winter-Jensen (WO 02/32591) in view of Haddow et al. (WO 03/035850) and Uhrich et al (US 2003/014614).

Claims 94 and 111 depend from amended claim 85. As indicated above, Claim 86 has been amended into Claim 85. Claim 86 was not rejected under this basis. It is respectfully submitted that Claims 94 and 111, as depending from amended Claim 85, are also patentable.

## DOUBLE PATENTING REJECTION

Claims 85-87, 90-94, 96, 102, 103, 108, 109 and 111-122 stand provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over Claims 41-77 of copending Application No. 10/509,431 in view of Haddow et al. (WO 03/035850) and Uhrich et al (US 2003/014614).

In view of the amendments herein, Applicants request reconsideration of this rejection.

Applicants: Short et al.
Application No: 10/560,210
Amendment and Response dated August 10, 2009
Reply to Office Action dated May 12, 2009
Page 11

# CONCLUSION

Applicants believe Claims 85 and 87-122 are in condition for allowance and respectfully request the same.

If there are any questions or if additional information is required, the Examiner is respectfully requested to contact Applicants' attorney at the number listed below.

Respectfully submitted,

Ludomir A. Budzyn

Registration No.: 40,540 Attorney for Applicants

HOFFMANN & BARON, LLP 6900 Jericho Tumpike Syosset, New York 11791 (973) 331-1700